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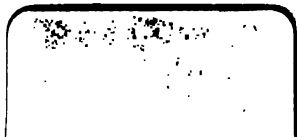
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A N
E S S A Y
ON THE
KING's - EVIL.

----- *Quod Medicorum est*
Præmittunt Medici ----- HOR.

By ROBERT WILLAN, M.D.



L O N D O N :

Printed for J. and P. KNAPTON, and T. LONG-
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*The following ERRATA were occasioned by the
AUTHOR'S Distance from the Press.*

IN the Preface, Page 10, Line 16, *Read*, Incorable: That it was
to esteem'd we need not, &c. P. 11. L. 7. ingenuous.

Page 2, Line 13. *Read*, Διασπυρροσσία. P. 7. L. 23. Gall-
Bladder. P. 10. L. 18. Viscid Chyle is received, &c. P. 12. L. 18.
Glands. P. 14. L. 5. Affinity with the others. P. 17. L. 3. We
prefer Riding. P. 22. L. 25. αλεγμαγόνια. P. 25. L. 28.
many that they cannot well be enumerated here; therefore the chief
of them only shall be mention'd. P. 26. L. 9. Sabina. P. 28. L. 19
Funnel. P. 30. L. 8. Turpentine, Eali, Capilla, &c. P. 35. L. 10.
principally. P. 39. L. 23. no more than, &c. P. 40. L. 5. effervesces.



T O

Dr. *MEAD.*



THE Art of Healing would seem to be of all Arts the most honourable, even tho' no better Reason could be given for it, than that it is the most difficult. The last is indeed so true, that the Task appears unsurmountable to many, and even to some of those whom propitious Heaven has bless'd with the brightest and most intelligent Faculties. The provident and

vi DEDICATION.

They have both gain'd and preserv'd the Esteem as well of the Multitude, as of the learned World, thro' a very long Series of successful Practice.

Several of these Considerations have induced me to present thee with the following Sheets, which contain naked Truths, undisguis'd with subtil and hypotheticalal Conjectures, but establish'd on plain and certain Principles, consonant to the unparallel'd System of *Boerhaave*.

That thou mayest long, very long, be preserv'd by thy own Art, to be an Example of Moderation, an Honour to the Profession, and a Patron of it's rising Sons, is the most sincere Wish and Hope of

Thy very respectful Friend

Robert Willan.



THE PREFACE.



*I will be unnecessary to tell the Learned of the Faculty, that nothing has yet been wrote upon this Subject, which might be sufficient for the Information of those who are unacquainted with it. The Systematic Writers have either forgot it entirely; as Boerhaave has done, or have pass'd it over superficially, and as often obscurely. To the young Artist, therefore, I presume this Piece will be acceptable; in which, tho' all has not been said which might be said, yet perhaps sufficient to assist him to form a more clear and perfect Idea of this Disease and its Method of Cure, than has hitherto been
b offer'd*

viii *The* P R E F A C E.

offer'd to the Publick. The Method of Cure he will find more ample than the other Parts of this Discourse, which are as concise as they could well be; but this will be readily excus'd, when he knows how much more difficult it is to cure this Malady, than to understand it.

*I should do Injustice to the Subject, if I forgot to take Notice, in this Place, of that very short and subtile Method, by which the gross Superstition of our Ancestors taught them to believe this very obstinate Disease might be cur'd, viz. By the wonder-working Touch of a Scepter'd Hand, or of a Piece of Money from the same Hand; but we are to remark, by the bye, that it must be the Hand of a lineal Heir to the Crown; for those intitled to it, by the Invitation of the Subject, or the Voice of the People, (tho' this was the best Title in the World) were not thought capable of performing this Feat, till this Royalty had been propagated to the second or third Generation. And this was so much attended to, that they scrupled not to make a Miracle the Test of his Prerogative or genuine Descent; as
may*

The PREFACE. ix

may be gathered from the Records of Antiquity. Tho' the Light of a better govern'd Education has shewn the Weakness and blind Credulity of our Forefathers, and made us Infidels to these and the like Traditions; yet we shall find that many of them still remain in Esteem, and even with those who want neither the Advantages of Learning, or of natural Sagacity; and with the Multitude most of them remain unshaken. Of these Traditions the Royal Touch for the Evil is none of the least sacred: The Origin of this Whim seems to be at least as old as the dark Night of Popery in this Island; having probably been contrived to answer the Designs of the crafty Priests upon a superstitious People, since by such a Miracle as this they might claim a Right to the Throne for that Prince who would best answer their Purposes; and such Miracles they would not fail of publishing by Wholesale, tho' upon no better Foundation than their own dark Inventions. This Conjecture will appear more probable to those who know, that from such vile Arts as these, viz. the forging of Miracles, the Popish Religion

b 2

gion receives no inconsiderable Support, even at this Day in Foreign Countries, tho' the Learned amongst them are not so blind as not to see it ; but a Hand of Cruelty commands at least their Silence, and forbids them to say that they have Eyes to see.

*From this Piece of Superstition then the Disease has borrow'd its English Name; at least a Part of it ; but how it came to be call'd by Way of Eminence the Evil, is to be the Subject of another Enquiry. It seems in Reality to have been owing to its great Obstinacy, which made it esteem'd desperate if not incurable : We need not wonder, if we suppose that they knew nothing of the true Genius of this, or any other Diseases a very few Centuries ago ; when the State of Physick in England, was as despicable as we can possibly conceive it to have been : Witness the Histories of Gilbert, John Gaddesden, &c. the Archiaters of those Days, when the Lives of Princes were trusted in the Hands of ignorant Mountebanks : But tho' they were not perhaps less ignorant than their Modern Brethren, they were
however*

however, content not with doing much Mischief or spreading Destruction around them as some of these have done; but with acting the Impostor well, and catching their Game, in which they discover'd at least as much Craft as our modern Quacks, and much more ingenious Roguery. By this we see that Physick is but new to our Clime, tho' in Justice to our Countrymen, it must be confess'd it suits the Soil so well, that 'tis likely to make as great a Figure in this Island, as in the ancient Empire of Arts and Sciences.

But they had another Reason for esteeming this Disease worthy the Appellation of a Plague or Evil, viz. it's being remarkably hereditary. This is indeed one of the worst Circumstances that can attend any Disease, which instead of being a private Misfortune, proves a Calamity to Families, and becomes an unhappy Mark of Distinction, as it appears always externally, and offers itself to the Observation of every Spectator. This indeed will appear a hard and unequal Law to those who have not consider'd that the Constitutions of Parents properly

perly belong to their Children, as much as the Species itself; nor can it be otherwise without reversing and counter-acting those uniform and perfect Laws which all Matter, and the organiz'd Bodies compos'd of it are oblig'd to obey. These Laws we may suppose as ancient as the first Formation of Matter, and the mighty Fiat which unfolded the great Scene of Nature: They seem, I say, to be as old as the Creation itself, nor can they be contradicted, varied or suspended, without violating that Order and most exact Harmony, which we observe in all Nature's Works, and which were inseparable from the Perfection of her Author.

But does it not hence follow, that all Diseases are, or must be hereditary? No: And why? This is no easy Question, except it be sufficient to say, that those Diseases only are hereditary, which can be communicated to the original Stamina of an animal Body. If this Answer be not satisfactory, we must be content to acknowledge our Ignorance, by appealing to others, "Dicat qui novit. This then was esteem'd both an incurable and hereditary

hereditary Disease, and this probably the Reason why it was chosen as the most proper Subject for a Miracle, as the Cure of the greatest Evil was fittest to demonstrate the best King.

I have only now to acquaint my Readers, that the following Doctrines are supported by the Dissection of Bodies, and other Matters of Fact. For as those Things which affect our Senses, are always esteem'd the surest and most infallible Test of every Doctrine; so a more than common Regard to these is necessary in our Attempts for the Advancement of Medicine; which as it is only conversible with sensible Bodies, ought not to admit any Thing for Truth which has not the Testimony of the Senses. On this Consideration, wearied with the Jargon and Confusion, which the Flights of fertile but deceitful Imagination had introduc'd into the noblest of all Sciences, Many of the wisest and most judicious of the Moderns are resolved to allow no Reasoning for Orthodox, which is not supported on the Basis of Demonstration. By this Means an Art, which has been accused of Doubt and Uncertainty, is already arrived

arrived at such Perfection, as may enable her devoted Sons to follow her Steps with perfect uninterrupted Satisfaction, and the Testimony of a good Conscience. A great and admirable Progress has been made in this Reformation, by the late incomparable Boerhaave, which will be a Subject of Praise and Admiration in Ages to come, and an Honour to the Age and Country in which he liv'd.



A N



AN
ESSAY
 ON THE
KING'S-EVIL.



NOTHING is more necessary to the perfect understanding any Disease, than a just and exact Definition; such an one as may determine the Bounds betwixt the real Subject and every Thing that may be disguised under a similar Appearance: This, which we shall call a determinate Definition, was never more requisite in any Disease, than that which is to be the Subject of this Essay; which, as it is observ'd to be remarkably hereditary, is reputed (tho unjustly) the most ignominious of Diseases, if we except the *Lues*; and for this Reason we ought to be well inform'd of the Requisites for distinguishing this *Hydra* from the

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many Maladies which bear any the least Resemblance to it.

For this Purpose then, we shall call by the Name of *Scrophula*, or King's Evil, a Swelling which has the following Characters: 'It is of the same Colour with the Skin, without Pain, and almost equal in Hardness to a *Schirrus*;' but these will not be so well understood, without adding, to them such a deprav'd State of the Fluids, as disposes them to be *pituitous*. By Depravity here, I mean no more than that original Disposition of both Solids and Fluids, which the Ancients call'd significantly enough *Vicioxumilia*, or *Temperamentum*, of which they had no less than eight different Classes. Of these, few were more remarkable than the *Temperamentum pituitosum*.

By *Pituita*, the Ancients understood too great a Solution of the Blood, in which the Particles have lost their Figure, Firmness and Solidity, from which it derives its red Colour, but at the same time cohere together too tenaciously; and thus we easily distinguish between this and the *Humid Crassa*, in which the Tenacity is not included.

It may be seen, that this Disposition of the Blood will render it unfit for many of its Functions, and alone is sufficient for the Production of the worst Diseases. And if it be ask'd, where there are most likely to be produc'd, or what Organs are

most likely to suffer? The Answer will be easy, those Organs in which the Circulation is the most difficult: And, pray, which are these? Every Body knows, the Glands. Their Structure seems so much to retard the Motion of the Fluids thro' their Vessels, and the propelling Force of the Heart and Arteries is so much diminish'd, that 'tis the greatest wonder the Circulation is not more frequently interrupted.

These, therefore, are the Parts of the Body most liable to be obstructed, and this is our Case at present, but amongst these the Glands of the conglobate Kind about the Face, Axillæ, Neck, Groin, &c. Yet these are not all the Glands that are observed to be affected; those of the Mesentery are also obstructed too, and perhaps the readiest of any, and indeed 'tis no wonder to those who consider the Structure, Situation, and the *Vis Propellens* of these Glands. This last Obstruction is indeed the productive Cause of the worst Symptom of this Disease, as will appear afterwards when we come to treat of the Symptoms.

But tho' this Malady principally affects the glandular System, and chiefly those Glands which we have mentioned, several other Parts are sometimes Sharers in the Calamity. This is in its last Stage, and does not happen till it has made a considerable Progress; and then, indeed, the Tendons, the Articulations, and the Bones themselves are likewise affected.

We ought, next in order, to deliver the Symptoms of this Disease; but as these cannot be understood without a previous Knowledge of its genuine Cause, we shall for the Sake of Perspicuity be oblig'd to postpone our Account of the several *Phænomena*, till we have discovered the Source from whence they are derived; and it had been well that this Method had been followed by many of those who have taken some Trouble to oblige the World with Essays on Diseases, which, tho' otherwise meritorious enough, have, for want of Order, fail'd in their Design, and left the Subject involv'd in its former Obscurity. 'Tis too well known to be dissembled, that this has been the Case with too many of our own Countrymen*, who wanted neither Genius nor Abilities to do Honour to the Subject, to their Art, and to their Country.

The proximate† Cause of this Disease appears to be nothing more, than a viscid pituitous State of the Fluids and too great Laxity of the Solids. By these we must endeavour to explain all the *Phænomena* we have to explain; and where these prove insufficient, we must patiently submit to the Imputation of Ignorance. This however is only to be understood

* The learned Dr. Astruc, speaking of a certain English Writer, says *Ordine parum composito differitur, saltem ea Methodo quæ Lucem afferat, quam in Anglorum Medicorum Operibus plerumque desiderari solemus. Pudet hæc Opprobria, &c.*

† See Pag. 2, and 3.

stood of the recent or simple *Struma*, without those desperate Symptoms to be observed in its last Stage, and which are to be referred to their proper Place.

The remote Causes of this Disease are, whatever Accidents are capable of producing the aforesaid Disposition, such as, first, an hereditary *Label*, which is perhaps the most frequent Cause. Every Body knows this Disease to be hereditary, but few know how it comes to be so; we may solve this Problem as easily as any other of the same Kind by saying, That an inviolable Law is imposed upon every *Genus* of created Bodies, whether animated or not, which propagate their Species, by which its *Fœtus* or *Embryo* not only agrees in every individual Organ with its Parent, but likewise partakes of its Perfections or Imperfections. Thus the solid Fibre produces another of the same Sort, and a lax Fibre a lax one, &c. Thus far we may proceed safely, and perhaps no farther; for in attempting a more minute Solution, we shall, I believe, find ourselves at our utmost Limits, and on the Border of Obscurity: There seem to be some Bounds placed to all Physical Enquiries, beyond which we cannot go, except in Imagination, and sometimes even that will fail us. I don't mean by this to undervalue the deep Philosopher or his profound Enquiries into the *Abcondita Naturæ*: No, the deep Man best deserves the Title of Philosopher, and will always receive the most Delight, as well as Honour, for the

the Reward of his Labour: But let us endeavour to be contented with the Knowledge within our Reach, and to place the Bounds betwixt deep and unfathomable, profound and unintelligible. By this means we shall save ourselves some Trouble, and avoid not a few Mistakes.——Thus much on hereditary Diseases.

The next of the remote Causes must be understood from the Consideration of that Time of Life in which it first discovers itself: This is in Childhood, when both Solids and Fluids always tend too much to that *Cachexia* which we have assign'd as the proximate Cause of the *Scrophula*. The *Fœtus* immediately after Conception is a meer Jelly, and scarce any Distinction can be made betwixt its solid and fluid Parts. In a few Months the first have acquir'd a stronger Power of Cohæsion, and the latter are more attenuated: At the Time of Birth this Change is yet more considerable, but the Vessels are yet very lax, and their contain'd Liquors are viscid and dispos'd to be pituitous; nor are they brought to a proper *Crafsis* in less than about twenty Years. Nobody who considers this will wonder why Children are so subject to this Disease, but the Disposition is often aggravated by their Way of living, and from the immoderate Use of sweet Fruits, farinaceous or other glutinous Substances, &c.

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We are now at Liberty to observe the several Phenomena, and will first begin with the Tumours themselves which were already describ'd in attempting to define the Disease. And *first*,

They are dispers'd, or, which is the same Thing, affect many different Glands at the same Time, and this needs no Explanation. *Secondly*, They are very smooth, and this will be best understood by considering the Structure of the Organs affected; as their Figure is globular, they will be equally distended on every Side by the obstrueting Matter in their Cavities, and thus their Surface will be even and smooth, tho' not commonly shining. *Thirdly*, These Tumours are also somewhat hard, tho' not so hard as the *Schirrhus*; the viscid Matter being lodg'd in the *Follicle* and confin'd there, the finer Parts are carried off by the *Absorbent Vessels*, and the remaining Matter becomes more viscid, then glutinous, and at length firm: This is no more than happens in a lesser Degree, in all the Cavities of the Body where their contain'd Liquors are permitted to remain for some Time; as the *Vesicula Seminales*, Gall, Bladder, &c. *Fourthly*, They are, even when ulcerated, without Pain; and this, perhaps, is not less remarkable than any of the other Peculiarities to this Disease. It will not be wonder'd that the *Conglobate* Glands have not this uneasy Sensation before their being ulcerated; as the same is observ'd in more Diseases than this, and may be explain'd afterwards; but the most sensible Parts, as well as the

the more firm, such as *Tendons, Ligaments, &c.* are destroy'd by this *Labe*, without any Sense of Pain. This indeed is not easily understood, except it be sufficient to say, that the Destruction of these nervous Parts is not owing to any acrid Matter which corrodes them; but to the Laxity of the Vessels in which the *Tension*, or attractive Force, is so small, as to allow their component Fibres to be divided without that Resistance which is the immediate Cause of Pain.

The next Symptom is an Inflation of the Face and Neck. This is indeed a constant Attendant of the *Struma*, and perhaps one of the best distinguishing Signs we are acquainted with. I remember to have heard a learned Physician, a Person of great Ingenuity, say, that by means of his long Experience and Practice, he could distinguish a Patient affected with this Disease, by only looking him in the Face. This Inflation is greatest in the inferior Part of the Cheeks; and is best understood, by considering that in this Habit of Body the Vessels are supposed too lax, which alone will be sufficient for understanding the Cause of an Inflation; but why this is confin'd to the Face and Neck, or at least is more remarkable in these than any other Parts is not so easily understood. Perhaps the Exposure of these Parts to the Action of Cold, by which the proximate Cause of the Disease is aggravated in their Vessels: The Number of Glands about these Parts, in which the Motion of
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the Blood is retarded or obstructed ; and *lastly*, an hereditary Disposition of the Parts themselves, may be sufficient for explaining this *Phænomenon*. We don't observe that the Complexion is so much chang'd as might be expected ; there is however a certain livid or bluish Cast, which is better learned by Observation than Description : This is seldom wanted, and in Children helps to compleat that particular Aspect of the Face, from which the Presence of this Disease will rarely be mistaken by those who have made the Study familiar.

Another remarkable Symptom of the *Scrophula*, is a great or frequent Pain in the Belly, which is easily understood from what was said before of the *Mesenteric* Glands, if these are rightly suppos'd to be the Seat of this Pain ; but indeed this Uneasiness in the Bowels seems, not less probably, to be produced by the viscid pituitous Matter lodg'd in the *Ruga* of the Intestines themselves ; and this will perhaps appear more reasonable, if we remember that the same Sort of Obstruction does not produce Pain in the other Glands, or even much more sensible Parts ; and that we find nothing more ready to produce a Cholic than this *Pituit* in the Intestines, as may be observ'd in the Diseases of Children.

The last Symptom we shall mention, and which is rarely absent in this Disease, is a great Prostration of the natural Functions ; those, to wit, of Digestion and Nutrition. This Change, or

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Process,

Process, is twofold, and may be comprehended under the general Heads of *Chylification* and *Sanguification*; but both these will suffer greatly in such a State of the Solids and Fluids as was before describ'd as the *proxima Causa* of this Malady. The first Requisite to the first of these Actions is Appetite, or Inclination for Food, which is here destroy'd by the great Quantity of viscid *Pituit* in the Stomach and Intestines. Again, after they are receiv'd into the Stomach, the Action of this is so weak, and the Juices necessary for dissolving the Food are so much depriv'd, that this Part of Digestion cannot proceed as it ought; and the same Defect will be found in the Intestines. The first Process therefore either is not perform'd at all, or at least very imperfectly, and this Deficiency cannot be repair'd afterwards, for this crude and viscid *Chyle*, when receiv'd into the Circulation in Order to undergo it's second Change by the Action of the Vessels; but this is already too weak for that Purpose, and thus the *Pituit* increases, and at length the vital Functions suffer. The last Consequence will be a Hectic Fever, not to be expected till near the End of the Tragedy.

All these *Phænomena* are sometimes accompanied with a Fever, Heat, &c. The Tumour then becomes painful, and at length ulcerated, and what we commonly call malign, pouring out a disagreeable *Sanies*, generating remarkably fungous Flesh, and yielding little or nothing to Remedies. The Fever
seem^s

seems not to be the genuine Effect of the Disease, except we suppose some other Cause to have acceded, as some acrid, irritating *Virus*, latent in the Fluids; but as this is not presum'd to be a Part of the Disease itself, we must be oblig'd to impute the Fever to a foreign Cause of this or some other Kind. I know a Fever to be the natural Product of this Malady in it's advanc'd State, but it is of the Hectic Kind, and generally the Forerunner of Death.

This Fever appears to be generally owing to the *Chyle*, which however crude and unprepar'd is receiv'd into the Vessels, and being incapable of undergoing its proper Change there, produces a *Febris Symptomatica*. The Circulation being now increas'd the Fluids are propell'd with more than wonted *Impetus* into the Glands, their *Follicles* are burst, and pour out a disagreeable *Sanies*.

The Consequence of all these is easily understood. The *Sanies* will be absorb'd in pretty large Quantity into the Mass of Blood, which being now infected contaminates the whole Circulation, and thus all Parts of the Body may be affected.

Many fresh Ulcers now appear on the external Parts; the Tendons and Ligaments themselves are eroded and exulcerated, likewise the Bones chiefly at their Extremities where their Texture is least firm by the *Laminae* being more separated from each other;

other ; at length the internal *Viscera* suffer in the common Calamity, as they must inevitably receive into their Vessels the same morbid Fluids which corrode and convert them into a similar *Saries*. This again is absorb'd into the common Mass, which now becomes yet more corrupted ; hence a *Pthifis Multiplex*, which is certain Death.

'Tis unnecessary, as well as unsuitable to the Design we laid down, to trace the various Symptoms, Effects, &c. of this *Pthifis* before it terminates in Death ; but it may be proper to take notice that it is incurable ; nor will a Proof of this be requir'd, after reflecting on what has been already deliver'd.

But the Progress of the *Scrophula* does not always observe the Order we have explain'd ; it sometimes makes a shorter Period by swelling the Thuroid Gland, which by compressing the *Aspera Arteria* puts a sudden End to the Scene. In this case, the necessary Relief cannot be easily given, and our principal Dependence must be on such Medicines as can be immediately applied to the Part affected, which must be in the Form of Vapour ; but of this more hereafter.

Thus far we have traced the Progress of the *Scrophula* with its several Symptoms, without supposing any other Disease connected with it, but this too frequently happens, and then 'tis easy to see how

how difficult will be the Cure, and how dubious the Event.

The Diseases we find sometimes joined to this are several, and those of the worst Kind too, which give a *Stimulus* to the tardy Progress of the *Struma*, and render its Termination shorter, as the Scurvy and *Lues*; in each of which is a considerable Degree of Acrimony, as is plain both from their Origin and Effects. They are to be discover'd by their proper Signs, and an exact and minute Enquiry into the Patient's former Way of Living, and into the Errors he may have committed in the Non-naturals sufficient for producing this or the other Species of Acrimony. By such a rigorous Enquiry into his History, we shall be able to judge more safely on this Head, than we can otherwise do by any Signs whatever.

Both the abovementioned Distempers shew themselves pretty clearly to the external Senses, as they appear for the most part on the Surface of the Body. The Ulcers of the *Lues* have some Peculiarities, which will not allow us to mistake them; and their Progress is so regular and uniform that we need not often be deceiv'd.

The Presence of the Scurvy is not determin'd with more Difficulty than that of the other; but to determine its Species, will require more Sagacity than may be readily believ'd by those who have not made the Experiment. To the Want of this Distinction

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we may impute the ill Success with which the Scurvy is so often treated, which need not surprize us if we consider that one Species requires a Method of Cure opposite to that of another, and a third has no Affinity with the other, either in its Origin or Method of Cure. In a word, they proceed from Causes entirely repugnant; and to attempt the Cure of the Scurvy by any one Sett of Medicines, would be just as reasonable as was the learned Bishop of C — ne's hardy Attempt to cure both the Pleurisy and Dropsy by his subtil *Tar-Water*.

Whoever therefore undertakes the Cure of the *Scrophula*, must examine with due Attention, whether it is accompanied with the abovementioned, or any other Diseases, that he may be able to draw a certain and faithful Indication.

The *Diagnosis* of this Malady was given before, and therefore nothing more need be said to it; and of the *Prognosis* what we have to say, will now be easily apprehended.

The hereditary *Struma* is by much the worst Species, and the same is true of all original Diseases, (for so we may call them) which, as they have their Essence intermix'd with the first Principles of Life, can scarcely be separated by a less Power than that which united them together; and tho' the Symptoms of perhaps all Diseases admit of some Mitigation, yet the Experience of Antiquity as well as
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our own, has taught us that the *Labes Hereditaria*, of almost every Kind, is incurable.

The next in Malignity we shall esteem that of those Children whose Parents were of a lax and weakly Habit, effeminate in their Way of Living, eating and drinking voluptuously, and indulging a sedentary unactive Life ; who, for Reasons we shall not attempt to give, derive to their Offspring a weak and sickly Machine subject to the Incroachment of many Diseases (from which their Parents might yet be free) and unable to make a proper Defence, or to receive all the Benefit of Medicinal Aid. These, when attacked by the *Scrophula*, may indeed be relieved, and perhaps cur'd ; but it will be necessary at the same time to repair and improve that Constitution which Nature had left imperfect, or rather which Nature's Antagonist had render'd so, *viz.* Luxury in the Parents.

But other Children there are afflicted with this Disease, whose Parents were strong, vigorous and healthy ; and themselves, when first brought into the World in every Respect healthy as their Parents, and likely to continue so ; yet, these are, perhaps, pretty early attacked by this Disease. In these, therefore, it must be attributed to some Error of the Non-naturals much aggravating that universal *Diathefis* in Children, which was first assign'd as the genuine Source of the *Scrophula*. These indeed have the fairest Chance of a sure and quick Relief from Medicine, as the Habit of Body was before very good,

good, and is fit for undergoing the Action of Medicines. These are indeed curable, and will rarely be disappointed of a perfect Cure from the Method we shall endeavour to deliver.

The first Thing in Order (for Order is here necessary) we have to do for the effectual Cure of this Distemper, will be the Correction of that Cachexy which is the fundamental Cause of it. The Means of doing this, are, *First*, By corroborating the Vessels. *2dly*, By diminishing the Quantity of the morbid Matter, both in the *primæ viæ* and whole Body. *3dly*, By concocting the Remainder.

To the first Intention, a proper Regimen of the *Nonnaturals* must be adapted, and on which it will principally depend: Let the Patient's Food be light and dry, not at all glutinous, but rather somewhat astringent. Roasted Meats, well seasoned with Spices, such as are generally used in the Kitchen, as Cinnamon, Mace, Cloves, &c. Bread exceeding well fermented, or such as has undergone that Process a second Time, and made from the dryer and less glutinous Vegetables: To these may be added the dry Fruits of the *Indies*. His Liquors must also be well fermented; and of these, the best are, fine old Ale, and the astringent Wines, if they are of a due Maturity, as *Rhenish*, *Red-Port*, &c. which will be much fitter for our Purpose, after being well impregnated with the dry Aromatics.

Exercise

Exercise is of no small Consequence in this Case : Of the several Diversions which go under that Name, prefer Riding, as well in this, as most other Diseases where Exercise is necessary, as it, perhaps, answers all the Intentions of Exercise in general, without any of the Inconveniencies which attend some of the other Species of it. We are, however, to be govern'd in this, as in every other Change of the *Nonnaturalis*, by the strict Rules of Prudence : Exercise is always to be proportion'd to the Strength of the Patient, nor ever to exceed it on any Pretence whatever ; and the Limits of this Direction will be best determin'd by the Patient, who is always to take the first Sensation of Weariness as a Caution to desist : This will be a certain and safe Rule, which, as it may be follow'd without any Uneasiness, as it is no more than avoiding Uneasiness, so he is always to esteem it sacred ; nor can he trespass upon it without greater Mischief, than those it was intended to remove. To check Nature, or her luxuriant Sallies, is no difficult Matter ; but to restore her when languid, oppress'd, and almost overcome with the Combat, is an hardy Task,

Hic Labor, hoc Opus est —————

Let us therefore remember always to have a proper Regard to her Preservation ; let us remember we are her Servants, and profess ourselves, yea, are ambitious of the Title of, *The Ministers of Nature.*

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The Air is of no mean Importance here ; the best is the dry, serene, and somewhat warm : If the Climate and Season are contrary, we must endeavour to supply their Defects within Doors ; and for this Purpose a Situation remote from much Wood and Water, on a dry and barren Soil, defended from the rainy Winds, will be most suitable. The House itself ought to be exceeding close, and preserved from Damp by large and constant Fires, and let its Windows confront the meridian Sun. The Patient's Chamber ought to be in the upper Part of the House, well wainscotted ; and let its Air be impregnated with the Effluvia of the most odoriferous Spices. Let his Bed be very hard, and composed of the cordial Astringent and most aromatic Plants. Moderate Sleep will be best ; that is, within the Compass of seven or eight Hours, which Number ought never to be exceeded, unless we are willing to increase the Malady. Sleep is a Time of Relaxation, and that always. The Muscles before wearied with Contraction, are now to be relieved by resting in a contrary State. And whence is this Change ? The contracting Cause ceases in all the voluntary Motions, that all these being still and quiet, the other Functions may be performed with less Interruption : The Circulation of the Fluids thro' their Vessels is now calm and undisturbed, because the *Equilibrium* betwixt them is not destroy'd by any foreign Agent. But there is another Cause of Relaxation besides that of Sleep itself, and which seems not to have been hitherto

hitherto sufficiently regarded, and that is, the Vapour form'd around the Body by its own Atmosphere ; which being confin'd, and as 't were reverberated by the Bed-Clothes, makes a true *Balneum Vaporis*, than which, a more powerful *Menstruum* is scarcely known for relaxing the Fibres of an animal Body : And this seems to produce all the ill Effects we observe from long Lying-a-bed, in those who lie awake a considerable Part of the Time : Of this Class, perhaps, may be supposed no small Number of the Ladies of Ease ; and this is probably one grand Cause of all those Diseases which are more peculiar to the Fair, and imputed to a lax and feeble Make of the Solids. The Atmosphere we have been speaking of, and which derives its Name from its Similitude to that surrounding the Earth, is no more than the invisible Matter of Perspiration, exhaling from every Point of the Body, and seems necessary for preserving it from the Injuries of the Air.

The Covering of the Body is of no small Consequence, which, as it ought to be well defended from the Cold, must also be incited to a brisk Perspiration : The Patient's Clothes therefore are to be thick and warm, and the best Materials for this Purpose is allow'd to be Wool.

The last of the *Nonnaturals* we shall speak to, are the Passions of the Mind. These ought never to be forgot in treating of any Regimen for the Cure of

chronic Diseases: Upon the Mind, as the first Mover, depends the Freedom and Perfection of all the Functions of the Body; and this is reciprocally true; and tho' we know not, or are ever likely to know, the Laws by which they act upon each other, this we well know, and constantly experience it, that their Connexion is such as will not allow one of them to be hurt without drawing the other into inevitable Suffering: *They rejoice and mourn together.* Whoever therefore desires to restore the Machine to its pristine Alacrity and Vigour, must always have an attentive Regard to its Associate and Fellow-Sufferer. This Design may be often effected in a considerable Degree by Medicine, by means of the mutual Intercourse we have been speaking of; but other artful Means are also to be used for exciting, alleviating, or diverting the Passions, which need not be mention'd here, as they don't properly belong to this Place. In the present Case a chearful and lively Disposition ought to be much encouraged, and the contrary to be diligently avoided or prevented. The first affords a free and liberal Supply of Spirits, as well to the Heart and the other involuntary Organs, as those subservient to the Will; and thus the Circulation dependent on them is brisk and free, which is always to be our Study in this and the like Diseases. The latter or sorrowful Mood produces the contrary Effects, and those remarkably enough.

The *second* Intention, or the Diminution of the morbid Matter, both in the *primæ viæ* and whole Body,

Body, is to be effected by cleansing that Canal, and evacuating the morbid Matter out of it; and by this Means we cannot fail of lessening its Quantity in every other Part of the Body. But this is to be done by two, and those very different Evacuations.

The *first* is Vomiting; which is no other than a convulsive Contraction of the Stomach, and these Organs, which, by Means of Nerves, immediately communicate with it, and is excited by any thing that is capable of producing that Contraction. It would be too tedious to give an Account here of the Operation of every kind of *Emetic*: A very small Number of them is now in use, and a much smaller will be sufficient for us here. The celebrated *Ipec.* which is now deservedly had in so universal Esteem, is by much the safest, and yet sufficiently effectual: With this therefore alone, we shall be contented in our present Design of evacuating the *Viscid Puit* lodged in the Stomach, if we may be allow'd sometimes on Occasion the *Tartar. Emet.* which, if the Dose be ascertain'd with the requisite Exactness, may deserve the second Place.

The *latter* Evacuation is effected by a Set of Medicines intended for that sole Use, under the general Name of *Cathartics*. But the judicious Ancients having observed the various Effects of *Cathartics*, in producing a larger Discharge of different Humors, have, with Care and Exactness enough, reduced them into proper Order, according to these various

enough for promoting this constant Motion, and be therefore insufficient for the Purpose. Those therefore will best answer our End which have a moderate and corrigible Acrimony, or envelop'd in some viscid and glutinous Matter; and of this sort are the following, which have many of them likewise a solvent Power; *Oxymel. Hiera Picra.* Several Preparations of *Mercury*, of which the safest and much the best is the *Merc. Sublimat. Dulc.* the *Chemical Salts* of the last Class, the Roots of *Meibacann. Brion. Jalap.* &c. The Fruit and middle Bark of the *Ehulus*, Juice of *Buckthorn*, &c.

Our next Design is the Concoction of the morbid Matter in the Vessels, and whole Body; but before we proceed allow me to observe, that this Concoction is no more than such a Change of the morbid Matter, as renders it no longer noxious, but assimilates it so much to the Nature of the sound Fluids, as to fit it for passing thro' its Vessels without Hurt; and then it will no longer deserve the Name of *Marbid*, but is transmuted or concocted so as to be an Humor *Sanus*; or, which is the same Thing, the Disease ceases. How therefore is this happy Change to be effected? To this the Answer is short,—By Nature herself: And if this Word be not acceptable, I shall change it for another, the *Vis Vita*, by which the Design is to be principally effected; tho' there is an additional Means to be afterwards mention'd, in which we shall be much beholden to Art. And indeed we must be so here,
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notwithstanding our Expectation of seeing it perform'd by the Hand of Nature, the *Vita*, the Action of the Vessels, and the Force of the Circulation. As these have not been hitherto sufficient for the Purpose (or the Disease could not have taken Place) we must render them so by proper Methods; which are, *First*, By corroborating the Vessels. *Secondly*, By stimulating them. The *first* will render them fit for Contraction, and the *latter* will force them to it. The best Method of corroborating the Vessels has been already given *ex Professo*. The *Stimulus* necessary here, may be communicated by a Set of Medicines, which have on this Account received the Name of *Stimulantia*; which, as they will be of eminent Service, deserve in this Place to be ranged in some Order. The *first* shall be those which act so upon the Mind, as to produce a greater Influx of the nervous Fluid, by which the Heart and Arteries are made to contract with greater Force as well as Velocity; and this we observe remarkably in several of the stronger Passions, as will be sufficiently demonstrated to any one who will take the Trouble of feeling the Pulse of a Person under such an Agitation; and this is true in a less Degree of the chearful and lively Disposition formerly mention'd.

The *next* and most general Stimulants are the *Aeria* of every Kind, but these are so numerous that they cannot well be enumerated, and this will be less necessary, only shall be recommended

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here: These are the *Aromatics*, of which the best are those which are at the same Time *Corroborants* or *Astringents*. Such are the greater Part of the following; the Barks of *Cinnamon*, *Peru*, *Winter*, *Cassia lignea*, &c. The Roots of *Gentian*, *Ginger*, *Imperatorium*, *Valerian*, *Calamus Aromaticus*, *Galangal*, &c. Seeds of *Cardamomum*, *Mustard*, &c. The Leaves of the *Abrunum*, *Abjuthium*, *Ruta*, *Sabin*, &c.

The last Tribe of *Stimulants* consists of those Things, which cannot be referred to either of the other two Orders, such as Fire, Wounding Instruments, Motion or Exercise, &c.

Having now laid down the Method by which Nature is to be enabled to concoct the morbid Matter, let us consider what further Assistance can be given to this Work by simple Art. The viscid *Pituit* which constitutes the Disease, is to be attenuated and divided; and therefore our Indication commands the Use of those Medicines, which are capable by a sole menstrual Power of inciding and attenuating. Some such valuable Medicines indeed we have, whose menstrual Force is perhaps much greater than is generally suppos'd: The following are the principal, viz. The neutral Salts, as the *Tartar regenerat.* *Tartar solub.* *Tartar Vitriolat.* the *Spiritus Mindereri*, which is indeed an excellent Resolvent, and seems well to deserve the Reputation it has acquired in a very few Years, a neutral Spirit
made

made for the most Part extemporaneously, by the Affusion of Juice of *Lemons* on the *Sal. Absinth.* or any other fix'd *Alkaline* Salt; the crude *Sal. Armoniac.*

I must not forget another Medicine, which seems to be endu'd with almost all the Properties we could wish for our Purpose, viz. of dissolving, stimulating, and attenuating; I mean the *Aq. Calc.* which, if it is used fresh, (as it always ought to be) will perhaps preserve it's Qualities, through the whole Course of Circulation, more perfectly than any Medicine we are acquainted with.

For all these inestimable Preparations we are obliged to Chemistry; they perhaps deserve to be esteemed the most universal Medicines we are acquainted with; and the Use of them is never to be forgot in this Disease, but to be insist'd on with the greatest Care and Diligence from the Beginning to the Compleating the Cure.

I shall not presume to direct my learned Reader in the Choice, Order and Method, of prescribing the Medicines, as all these will vary according to Circumstances; but it may not be amiss to observe that those which dilute and attenuate are always first to be used, and that for a competent Time; and when this End is obtain'd, the Expulsion of the relaxed or concocted Matter will be easy. But

the *Attenuantia*, if prudently chosen, can never be given unreasonably.

We have now treated of our great Design of correcting the universal *Cachexy*, and we are next to consider the safest and most effectual Method of taking away the Tumours: And this is threefold. *First*, By Resolution. *Secondly*, By Suppuration. *Thirdly*, By the Knife. The Resolution of this Sort of Tumours will be difficult enough, nor ought it to be attempted in their more advanc'd State; those only being fit for Resolution which are recent, gentle, and where other Circumstances are the best, and then it is to be perform'd if it can be perform'd at all: 1. By the internal Medicines for correcting and eradicating the proximate Cause of the Disease. 2. By Topical Applications, of which perhaps the best will be in Form of Vapour: For this Purpose the *Antiseptics* are best, as Vinegar, whose Vapour may be directed through a Tunnel. The *Antiseptic* Gums may be likewise very fitly apply'd in the Form of Plaister, &c. We shall not insist longer on this Resolution as we are not acquainted with any better Methods for that Purpose.

2. The Suppuration of these obstinate Tumours is to be attempted by the Application of those Substances we generally term *Maturants*, or *Suppurants*; which, tho' suppos'd to operate in some hidden or specific Manner, do no more than confine,

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and, if the Term be allowable, reverberate the natural Heat, and by this Means promote that Change, which Nature herself only can effect, of the morbid Matter into *Pus*. Thus all *Gummas*, oily, or farinaceous Substances, become *Suppurants*, when apply'd in the Form of Plaister or Poulitice; such are Ballams, most Refins, Meal of Barley, Oats, or Wheat, &c. These will not be less effectual if they have added to them some small Degree of *Acrimony*. When the Tumour is suppurated, and not till the Process is quite perfected, it may be open'd at Discretion, either by Incision or the potential *Cautery*, and then the Ulcer is to be treated like an ordinary one, by the common *Detergents*.

But neither Resolution nor Suppuration will sometimes succeed, and this is when the Tumour is very hard; and when this happens we have but one Method to chuse, *viz.* Extirpation by the Knife, according to the ordinary Rules of Art; but this Operation is not to be undertaken without well considering the Circumstances of the Case. If, however, the Disease be not inveterate, and the Tumour is benign, it may be extirpated; but not without observing it's Situation, and Proximity to the larger Vessels, which will sometimes absolutely forbid it.

The exulcerated Tumour is next to be treated of, and is to be healed, 1. By internal Medicines, *viz.*

viz. such as may correct the putrid *Acrimony*, which has now contaminated the whole fluid Mass, and is likely to produce a *Pthysis multiplex* : This is to be done by mild, demulcent Medicines, together with the *Antiseptics*. For this Purpose the Use of Milk is to be insisted on, together with such Medicines as best answer this Intention : such are the native Balsams, *viz.* Turpentine, Tar, Bals. Gapiui, &c. 2. By destroying the Remainder of the Tumour and fungous Flesh by *Escharotics*, together with the ordinary *Detergents* mixed with them ; and when this is done the *Cicatrizantia* are to be apply'd . . .

There is another Kind, or rather Form, of the exulcerated *Sirama*, which preys upon the *Membrana Cellulosa*, betwixt the Muscles, forming large *Sinus's* betwixt them ; and these will be difficultly healed, as indeed are all other *Sinus's* betwixt Muscles : These are, however, to be treated much like others, *viz.* By filling them with Digestives and injecting *Detergents*. 'Tis easy to see that this Manner of treating them (and we are not acquainted with a better) will require a very considerable Time for the healing of such very deep Ulcers. When the Tendons, Articulations, &c. are affected in the Manner we formerly describ'd, they are to be treated like ordinary *Apsflems*, Care being taken to correct as much as possible the putrid *Diathefis* of the Blood, by the Method above prescrib'd. It seems unnecessary to mention, after what has been said already,

that

that if we discover any Signs of the Scurvy, or *Lues*, they are to be treated according to the establish'd Rules of treating those Diseases; and if any Contradictions should occur we can never be at a Loss, if governed by that Golden Axiom of the Schools;

Ubi Indicatio imperat, animadverti, tum semper est satisfaciendum maximæ.

Thus I hope to have given such a Method of Cure in this obstinate Disease, as will not need further Explication: If it is persisted in with the Resolution always to be expected from those who wait for the Cure of Chronic Diseases, we cannot doubt of all the Success which it is in the Power of Art to give. To say more will be superfluous; I therefore shall proceed to some other Matters relating to this Malady, absolutely necessary to be consider'd by those who wish to be Masters of the Subject.

The first Thing which deserves our Animadversion, is the common Complaint of it's Return, after the Tumours, or Ulcers, have been extirpated and healed. 'Tis true, this is often the Case, and is no small Discouragement to the Patient and his Friends, and sometimes obliges them to sit down contented with believing that the Malady is incurable. But the Reason of all this is not difficult; they have attempted the Cure of the Disease without eradicating it's real Cause or Essence, the external Appearances

Appearances being no more than the Product or Effects of the other. 'Tis no Wonder, therefore, that they have been disappointed, and that the Tumours return very soon after they have been taken away; and, indeed, to expect a Cure from this Method, is just as reasonable as it would be to hope for the Cure of an Inflammation by the Use of an Opiate.

As the Use of Mercury has been much recommended in this Disease, we cannot avoid taking notice of it, and giving our Reasons for not mentioning it, in delivering the Method of Cure. We shall first therefore observe in what manner it operates, so as to produce Salivation; and this is now generally agreed to depend on the Weight and Figure of its Parts, by which it increases the *Momentum* of the Blood, divides the Globules, and destroys their attracting Force; in a word, dissolves a great Part of the Mass into a putrid *Tabum*, and fits it for passing readily off by the secretory Organs, which however happens almost constantly (for Reasons we shall not now attempt to give) by the salivary Glands. This wonderful Effect of a wonderful Fluid does not seem to depend on any other Principles than these we have given; and therefore it appears to act chiefly on the red Globules of Blood, and that the phlegmatic Particles cannot be easily attenuated by it even whilst in the Vessels; and this will be much less probable when out of the *Laws* of Circulation, as the Glands may in some sense

ense be said to be. But if Mercury cannot eradicate the Cause of the Disease, when in its recent State, it will be much less beneficial, yea, an absolute Poison, when the Disease is so far advanced as to have produced a Suppuration; and when the Tendons, Articulations, &c. are affected, when the Pus being absorb'd and convey'd into the Blood, contaminates the the whole Mass with the putrid Acrimony, and thence produces an universal and desperate *Phthisis*: In this case, I say, Quicksilver, cannot be exhibited without the worst Effects. The putrid *Diathefis* of the Blood was already such as threatned inevitable Death, and is the whole Mass to be now render'd in a worse degree putrid? which is the genuine Effect of Mercury; nor is this all, the augmented Velocity of the Blood augments the Hectic Fever, and thus every Thing conspires towards a fatal Period.

The Reader has perhaps already wonder'd that no mention has yet been made of Mineral Waters in the Cure of the *Scrophula*, which must be excus'd by saying, we designedly referred him hither for the sake of shewing the Use which has been discover'd in one of our own Mineral Waters for that Purpose; I mean the celebrated Spaw at *Scarborough*, whose Reputation, which long and repeated Experience has acquir'd it, is not more than equal to its Merit. We shall endeavour to demonstrate very soon, that its constituent Principles are such as render it as universally useful, as 'tis possible for any

Mineral Water to be, or as any Medicine which the benevolent Hand of Nature has hitherto pointed out for the Preservation or Restoration of the Health of Mortals. 'Tis indeed impossible for us to avoid the Suspicion of Prejudice in treating on this Subject ; but we beg leave to observe, that neither that Suspicion, nor any other Reason ought to deter us from doing Justice to the Cause of Truth, or from publishing it when it concerns the Welfare of the Community and the Happiness of Mankind. But we shall endeavour to prove, that this Character of the *Scarborough* Spaw-Waters is more than a Panegyric, and that they are adapted to the Cure of very many obstinate Chronic Diseases, tho' of few more aptly than the *Scrophula* ; in which our grand Intention has been to evacuate the viscid Matter out of the *primæ Viæ*, to attenuate the Fluids, gently to stimulate the Solids, and to invigorate the Spirits ; and I appeal to the Judgment of the Learned whether these Indications are not the most universal ones we are acquainted with, for eradicating the first Cause or Source of the whole Chronic Tribe. In order therefore to determine the Merit of these Waters, let us consider their Principles separately ; which is, doubtless, the most certain Method of determining the real Properties and Value of Medicines, or Medicinal Waters ; as by this means only we can be enabled to judge of their Manner of Operation, and of explaining all their *Phænomena*. We know it is objected, and that truly, that the component Parts of Bodies cannot be supposed to have

have existed in the same Form before their Separation, as after they are divided by the Action of Fire; and that therefore a Chemical Analysis is not sufficient for teaching us their Properties, as it does not shew us in what Form they existed before this Separation, and how the several heterogeneous Particles were united; since on the Form of their previous Existence and Manner of Union will very much depend their Effects. This Objection, as we have already confessed, is just; but it is punctually so of those solid Bodies, which cannot be analysed without extreme Torture of the Fire, in which the whole Process is perform'd with Violence; but this is not the case with fluid Bodies, and those of a less firm Texture; for of these we can discover the constituent Principles, and their Proportions, to each other, with little Force and great Certainty, and can determine their Effects with happy Exactness. In the *Scarborough* Spaw-Water, accurate and judicious Experiment has discover'd the following Principles.

1st. An Aqueous Fluid differing very little in any of its sensible Properties from common distilled Water, from which 'tis impossible by any Sort of Trial to distinguish it; from whence let us learn that the Medicinal Virtues of the Spaw Water don't reside in this very simple Fluid.

We are now to consider what Medicinal Uses this simple Water retains, in order to understand the Effects of that compound Fluid of which it

constitutes so great a Part. And *first*, it is as we shall afterwards see the most suitable, and indeed the only suitable, *Menstruum* for dissolving the other Principles, and rendering them as effectual as possible by conveying them into the most minute Branches of the Vascular System; as it is the most subtle Fluid we are acquainted with, Mercury excepted, and capable of passing thro' Vessels of inconceivable Smallness; and the famous *Florentine* Experiment has taught us, that it is capable of passing thro' the least porous, that is most solid, of all solid Bodies, *viz.* Gold. This Property alone is sufficient to render it, valuable as a *Menstruum*, and the Smoothness of its Particles is such, as renders it entirely innocent; for it does not discover the least Degree of *Acrimony* when apply'd to the most sensible Part of an Animal Body, *viz.* the Eye; but on the contrary, is one of the most general *Antacria*.

2dly, The several Properties of Elementary Water, which cannot be fitly recited here, will shew us, and the Experience of Antiquity has confirm'd it, that Water the most common, and for that Reason the most neglected of all Medicines, ought to be esteem'd one of the most universal. If it be true that the much greater Part of Diseases proceed from Obstruction, that Medicine will be most generally useful which best answers the Indications which Obstructions in general require; and the two chief of these are, to attenuate and relax. Whether are not these the remarkable Effects

Effects of Water ? In acute Diseases the Obstruction is attended with a Fever, and these constitute an Inflammation, and then another additional *Postulatum* is required in the Indication, *viz.* to moderate the Fever by cooling, diluting, correcting *Acrimony* ; and how beautifully are all these perform'd by Water ? Nor can they be perform'd without it. I don't mean by this that simple Water is only fit or necessary for all these Purposes ; by no Means: But all the Emulsions, Infusions, Decoctions, &c. which are or can be given in acute Diseases, consist for the far greatest Part of Elementary Water. We need not therefore wonder, that *Boerhaave*, the sagacious and incomparable *Boerhaave*, in speaking of *Panacea*'s, numbers Water amongst the *quatuor Remedia maximè universalia*. I am far from intending by this to extol this Medicine beyond its due Merit, or to espouse the Cause of a late Writer, who weakly undertook to prove it a Cure for every Disease: No ; let me be allow'd this Opportunity of declaring myself a profess'd Enemy to all the *Panacea*'s, which Ignorance, Avarice, or Vain-Glory, have hitherto introduc'd into the World ; and which have no Foundation in the Essence of Things, but are contrary to the known Laws of Nature ; and a very small Share of plain Philosophy, or indeed of plain Sense, is sufficient to shew them contrary both to Philosophy and Sense. But the Subject naturally led, or rather obliged me, to speak of the Virtues of Water, and to do Justice to its Merit.

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The next and chief Principle of the *Scarborough* Water is a neutral purgative Salt (as indeed all neutral Salts are purgative when directed by a proper Regimen) of a remarkably bitter Taste, readily dissolving in the Mouth, its Pungency seeming to penetrate deep into the Tongue, tho' without impressing any nauseous Sensation. It easily dissolves in the Air, tho' not near so readily as the *Tart. Regenerat.* and very quickly in twice its Weight of cold Water.

These Properties only are sufficient to shew, that this Salt appears at least *a priori* to be an excellent *Deobstruent*, as all neutral Salts deserve to be esteem'd. Rational and Experimental Chemistry has taught us, that they have a surprizing solvent Power, and are therefore in a fluid Form the fittest Medicines we know of in the greater Part of chronic Diseases. Long and repeated Experience has also taught, that the *Scarborough* Salt or Water are wonderfully safe, and have produced as few ill Effects as any efficacious Medicine can be supposed to do : But this, like all other Medicines, ought to be administer'd by a judicious Hand, to those who expect all its Advantages without any Inconveniences, which may well be expected from the imprudent or unseasonable Use of the best Remedies in Nature ; tho' these are, perhaps, no where fewer than in the *Scarborough* Salt and Water. It don't appear necessary in this Place to repeat what has been already said

said of neutral Medicines: They were believed, if not demonstrated, to be the most useful Class of Remedies in the Cure not only of the *Scrophula*, but of the greater Part of chronic Diseases. If this be true, or shall be granted by the Adepts in Physick, the *Spaw-Waters* of *Scarborough* will certainly deserve their Regard, Esteem, and Recommendation.

The Salt may be given like other Neutrals, either as a Purgative or Alterant, by proportioning the Dose to the Intention: Its Action may likewise, by a proper Regimen, be directed to the Kidneys; and it seems not less fit for answering the best Intentions of a *Diuretic* than any other Medicine of that Denomination. Its Operation is mild, easy, and gentle, and in this differs from most other *Cathartics*, that it revives and exhilarates the Spirits, producing and leaving after it a chearful Briskness; an Effect, I say, contrary to that of most other Purgatives, which generally fatigue the Body, and depress the Spirits.

3dly, There is another Salt in this Water to be separated from it after the ChrySTALLIZATION of the other, and appears no other than common Sea Salt, whose singular Properties it discovers on every Experiment. Its Quantity is but small, being only to the other in the Proportion of 1 to 18. Its Effects must consequently be inconsiderable: It will, however, be allow'd to promote, in some small Degree,

Degree, the Operation of the Waters, and contribute to the preserving it from Putrefaction.

The *fourth* Principle is a white Powder or Earth, which the most ingenious Dr. *Shaw* calls an *Alcaline* Substance, as it effervates with all Acids, and changes the Syrup of Violets green. To this Earth are probably owing the good Effects, daily experienced, from drinking these Waters after the immoderate Use of Wine, by correcting the Acidity which such Liquors contain and discover by their ill Effects in the Stomach.

The *fifth* Principle of the *Scarborough Waters* is Air, and this it will be said is contain'd in all Water; and indeed it had been unnecessary to have taken notice of it here as a Principle, but that it is observ'd in somewhat more than ordinary Proportion. Of this Air we shall say no more than that to it is considerably owing its brisk Taste, and perhaps its quicker Operation.

6thly and *lastly*, A Mineral Spirit consisting of Particles of Iron exceedingly subtiliz'd: These are in no inconsiderable Proportion, and must produce in some Degree the excellent Effects of *Chalybeate* Preparations, than which no Medicines we are acquainted with more effectually corroborate the Vessels, attenuate the Fluids, increase the Circulation, and invigorate the Spirits. This Spirit is inconceivably volatile, almost as much so as Heat itself,
and

and scarcely to be confin'd by any Art, which makes it necessary for those, who wish to have the entire Virtues of the Water, to drink it at the Well.

Thus much on the *Scarborough Spaw-Waters* may be sufficient to give such an Idea of their Nature and Properties, as may shew how well they are adapted to the Cure not only of the Disease, which has been the Subject of this Essay, but of the greater Part of the formidable Chronic Tribe.

F I N I S.





